

## CLAIMS:

1. A cashless vending system, comprising:

a vending machine for vending commodities;

a portable communication terminal used to purchase commodities from the vending

5 machine; and

a center device for managing the sales of the commodities from the vending machine using the portable communication terminal, wherein:

the vending machine comprises:

a first code issuing means for issuing a first code about the sales of a commodity in  
10 response to a request by a user who desires to buy the commodity;

a second code obtaining means for obtaining a second code about commodity selling permission, which is issued by the center device according to communications with the center device by the portable communication terminal, via the portable communication terminal;

15 a sales control means for controlling the sales of the commodity according to the second code obtained by the second code obtaining means; and

a third code issuing means for issuing a third code about cancellation of the sales of the commodity according to an operation by the user;

the portable communication terminal comprises:

20 a first input means for inputting the first code which is issued by the first code issuing means of the vending machine;

a first transmitting means for sending the first code, which is input by the first input means, to the center device;

a receiving means for receiving the second code which is issued by the center device;

25 a second input means for inputting the third code which is issued by the third code issuing means of the vending machine; and

a second transmitting means for sending the third code, which is input by the second input means, to the center device; and

the center device comprises:

a verifying means for verifying the portable communication terminal according to communications with the portable communication terminal;

5 a settlement processing means for performing a settlement processing according to the first code sent by the first transmitting means of the portable communication terminal;

a second code issuing means for generating the second code by performing a prescribed processing of the first code and sending to the portable communication terminal; and

10 a settlement processing cancel means for canceling the settlement processing according to the third code sent from the second transmitting means of the portable communication terminal.

2. The cashless vending system according to Claim 1, wherein:

15 the portable communication terminal has a display means for displaying the second code received by the receiving means;

the vending machine has an image reading means for reading the second code displayed on the display means; and

the second code obtaining means obtains the second code by reading the second code, which is displayed on the display means, by the image reading means.

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3. The cashless vending system according to Claim 1, wherein:

the vending machine has a display for displaying the first code which is issued by the first code issuing means;

25 the portable communication terminal has an imaging means which is built in or externally connected; and

the first input means inputs the first code by taking a picture of the first code, which is displayed on the display of the vending machine, by the imaging means.

4. The cashless vending system according to Claim 1, wherein:

the vending machine has:

a change return lever, and

a detecting means for detecting an operation of the change return lever; and

5 the third code issuing means performs a prescribed processing of the first code to generate the third code and issues it when the operation of the change return lever is detected by the detecting means after the first code is issued by the first code issuing means.

10 5. The cashless vending system according to Claim 1, wherein:

the vending machine has a display for displaying the third code which is issued by the third code issuing means;

the portable communication terminal has an imaging means which is built in or externally connected; and

15 the second input means inputs the third code by taking a picture of the third code, which is displayed on the display of the vending machine, by the imaging means.

6. A cashless vending control method, comprising:

20 issuing a first code about the sales of a commodity from a vending machine in response to a request by a user;

inputting the first code, which is issued from the vending machine, to a portable communication terminal carried by the user;

sending the first code, which is input to the portable communication terminal, from the portable communication terminal to a center device;

25 verifying the portable communication terminal by the center device according to communications with the portable communication terminal;

performing a settlement processing of the sales of commodity by the center device according to the first code sent from the portable communication terminal;

generating a second code about the commodity selling permission by performing a prescribed processing of the first code by the center device and sending it to the portable communication terminal;

5 displaying the second code, which is sent from the center device, on the display section of the portable communication terminal and presenting it to the vending machine;

reading the second code, which is displayed on the display section of the portable communication terminal and presented to the vending machine, by the image reading section of the vending machine;

10 controlling the sales of commodity in the vending machine according to the second code read by the image reading section;

issuing a third code about cancellation of the sales of the commodity from the vending machine in response to an operation by the user of the vending machine;

sending the third code to the center device when the third code is issued by the third code issuing means of the vending machine; and

15 canceling the settlement processing by the center device according to the third code sent from the portable communication terminal.

7. The cashless vending method according to Claim 6, wherein:

20 the portable communication terminal displays the second code on the display section thereof; and

the vending machine obtains the second code by reading the second code displayed on the display section of the portable communication terminal by the image reading means.

8. The cashless vending method according to Claim 6, wherein:

25 the vending machine has a display for displaying the first code; and

the portable communication terminal inputs the first code by taking a picture of the first code, which is displayed on the display of the vending machine, by an imaging means which is built in or externally connected to.

9. The cashless vending method according to Claim 6, wherein the vending machine performs a prescribed processing of the first code to generate the third code and issues it when an operation of a change return lever of the vending machine is detected after the  
5 first code is issued.

10. The cashless vending method according to Claim 6, wherein:  
the vending machine has a display for displaying the third code; and  
the portable communication terminal inputs the third code by taking a picture of the  
10 third code, which is displayed on the display of the vending machine, by an imaging means which is built in or externally connected to.

11. A vending machine from which a user can buy commodities by using a portable communication terminal possessed by the user, comprising:  
15 a first code issuing means for issuing a first code about the sales of a commodity in response to a request by the user desiring the sales of the commodity;  
a second code obtaining means for obtaining a second code about commodity selling permission, which is issued by a center device according to communications with the center device by the portable communication terminal, via the portable communication  
20 terminal;  
a sales control means for controlling the sales of the commodity according to the second code obtained by the second code obtaining means; and  
a third code issuing means for issuing a third code about cancellation of the sales of the commodity according to an operation by the user.

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12. The vending machine according to Claim 11, wherein:  
the third code issuing means performs a prescribed processing of the first code to generate the third code and issues it when an operation of a change return lever is detected

after the first code is issued by the first code issuing means.

13. A center device for settling sales made by a vending machine via a portable communication terminal possessed by a user, comprising:

5 a verifying means for verifying the portable communication terminal according to communications with the portable communication terminal;

a settlement processing means for performing a settlement processing according to a first code about the sales of a commodity sent from the portable communication terminal;

10 a second code issuing means for generating a second code about commodity selling permission by performing a prescribed processing of the first code and sending it to the portable communication terminal; and

a settlement processing cancel means for receiving a third code about the cancellation of the commodity sales issued by the vending machine according to an operation of the vending machine via the portable communication terminal and canceling the settlement  
15 processing according to the received third code.